UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,892	02/12/2002	Hirohisa Tasaki	1163-0390P	3563

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER
AZAD, ABUL K

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 May 2005</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-21</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This action is in response to the communication filed on May 25, 2005.

2.   Claims 1-21 are pending in this action. Claims 3-12 and 15-17 have been

amended. Claims 18-21 have been newly added.

3.   Applicant's arguments with respect to claims 1-21 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

5.   Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Gersho

et al. (US 6,311,154).

As per claim 1, Gersho teaches, "a speech coding method of selecting an

excitation mode from a plurality of excitation modes, and encoding an input speech

frame by frame with a predetermined length by using the excitation mode selected",

said speech coding method comprising the steps of:

"encoding in the respective excitation modes a target signal to be encoded that is obtained from the input speech, and outputting coding distortions involved in the encoding" (col. 12, lines 1-15);

"comparing at least one of the coding distortions involved the encoding with one of three threshold values consisting of a fixed threshold value, a threshold value that is determined in response to signal power of the input speech and a threshold value that is determined in response to signal power of the target signal to be encoded" (col. 12, lines 16 to col. 13, line 52); and

"selecting the excitation mode in response to the coding distortions involved in the encoding and a compared result at the step of comparing" (col. 12, lines 16 to col. 13, line 52).

As per claim 2, Garsho teaches, "a speech coding method of selecting an excitation mode from a plurality of excitation modes, and encoding an input speech frame by frame with a predetermined length by using the excitation mode selected", said speech coding method comprising the steps of:

"encoding in the respective excitation modes a target signal to be encoded that is obtained from the input speech, and outputting coding distortions involved in the encoding" (col. 12, lines 1-15);

"selecting one of the excitation modes in response to a compared result obtained by comparing the coding distortions involved in the encoding" (col. 12, lines 16 to col. 13, line 52);

comparing the coding distortion corresponding to the excitation mode selected at the step of selecting with one of three threshold values consisting of a fixed threshold value, a threshold value that is determined in response to signal power of the input speech and a threshold value that is determined in response to signal power of the target signal to be encoded" (col. 12, lines 16 to col. 13, line 52); and

"replacing the excitation mode selected at the step of selecting, in response to a compared result obtained at the step of comparing" (col. 12, lines 16 to col. 13, line 52).

As per claim 3, Gersho teaches, "the threshold value is one of a fixed threshold value and a threshold value that is determined in response to signal power of the target signal to be encoded" (col. 8, line 53 to col. 10, lines 8).

As per claim 4, Gersho teaches, "wherein the threshold value is prepared for each excitation mode" (col. 9, lines 3-11).

As per claim 5, Gersho teaches, "a step of converting replaces the coding distortion with the threshold value, when a compared result obtained at the step of comparing indicates that the coding distortion by a predetermined excitation mode is greater than the threshold value, wherein the step of selecting selects an excitation mode corresponding to a minimum coding distortion among the coding distortions of all the excitation modes including the coding distortion replaced at the step of replacing" (col. 12, lines 1-16).

As per claim 6, Gersho teaches, "wherein the step of replacing selects a predetermined excitation mode when the coding distortion corresponding to the

excitation mode selected at the step of selecting is greater than the threshold value"

(col. 13, lines 1-52).

As per claim 7, Gersho teaches, "the threshold value is set at a value constituting

a predetermined distortion ratio to one of the input speech and the target signal to be

encoded" (col. 12, lines 1-16).

As per claim 8, Gersho teaches, "the step of deciding characteristic of speech by

analyzing at least one of the input speech and the target signal to be encoded, wherein

converting converts the coding distortions output by the step of encoding only when the

step of deciding outputs a predetermined decision result" (col. 12, lines 17-55).

As per claim 9, Gersho teaches, "deciding characterstic of speech by analyzing

at least one of the input speech and the target signal to be encoded; and calculating a

threshold value in response to a decision result at the step of deciding, wherein the step

of comparing carries out its comparison using the threshold value calculated at the step

of calculating the threshold value" (col. 9, lines 3-55).

As per claim 10, Gersho teaches, "wherein the step of deciding makes a decision

as to whether characteristic of speech is onset of speech or not" (col. 12, lines 27-40).

As per claim 11, Gersho teaches, "wherein the plurality of excitation modes

comprise an excitation mode that generates non-noisy excitation and an excitation

mode that generates noisy excitation" (col. 13, lines 53-61).

As per claim 12, Oshikiri teaches, "wherein the plurality of excitation modes

comprise an excitation mode that uses non-noisy excitation codewords, and an

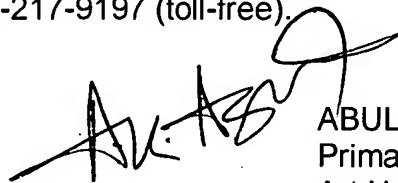excitation mode that uses noisy excitation codewords" (col. 13, line 53 to col. 145, line 24).

As per claims 13-21 they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1-12.

Contact Information

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABUL K. AZAD whose telephone number is (571) 272-7599. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ABUL K. AZAD
Primary Examiner
Art Unit 2654

August 1, 2005